

Prospects for Optical Monitoring of Blazars during the GLAST Mission



Presented by John Mattox on 10/24/02 at the GLAST Collaboration meeting.

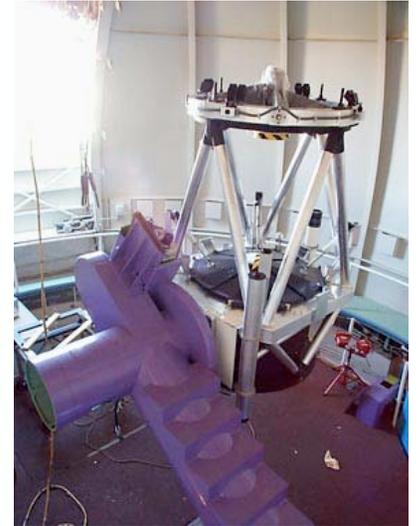
ATN Concept



- The goal of the Automatic Telescope Network (ATN) initiative is to provide for coordinated utilization of telescopes at diverse longitudes to obtain extended optical coverage of selected blazars during the GLAST mission.

RCT Telescope

- Robotically Controlled Telescope
- Dedicated to imaging: blazars, GRBs, extra-solar planet occultation search, narrow line studies of galactic diffuse features, binary stars.
- RCT Consortium also includes SCSU, WKU, PSI, Villanova University
- www.psi.edu/rct/





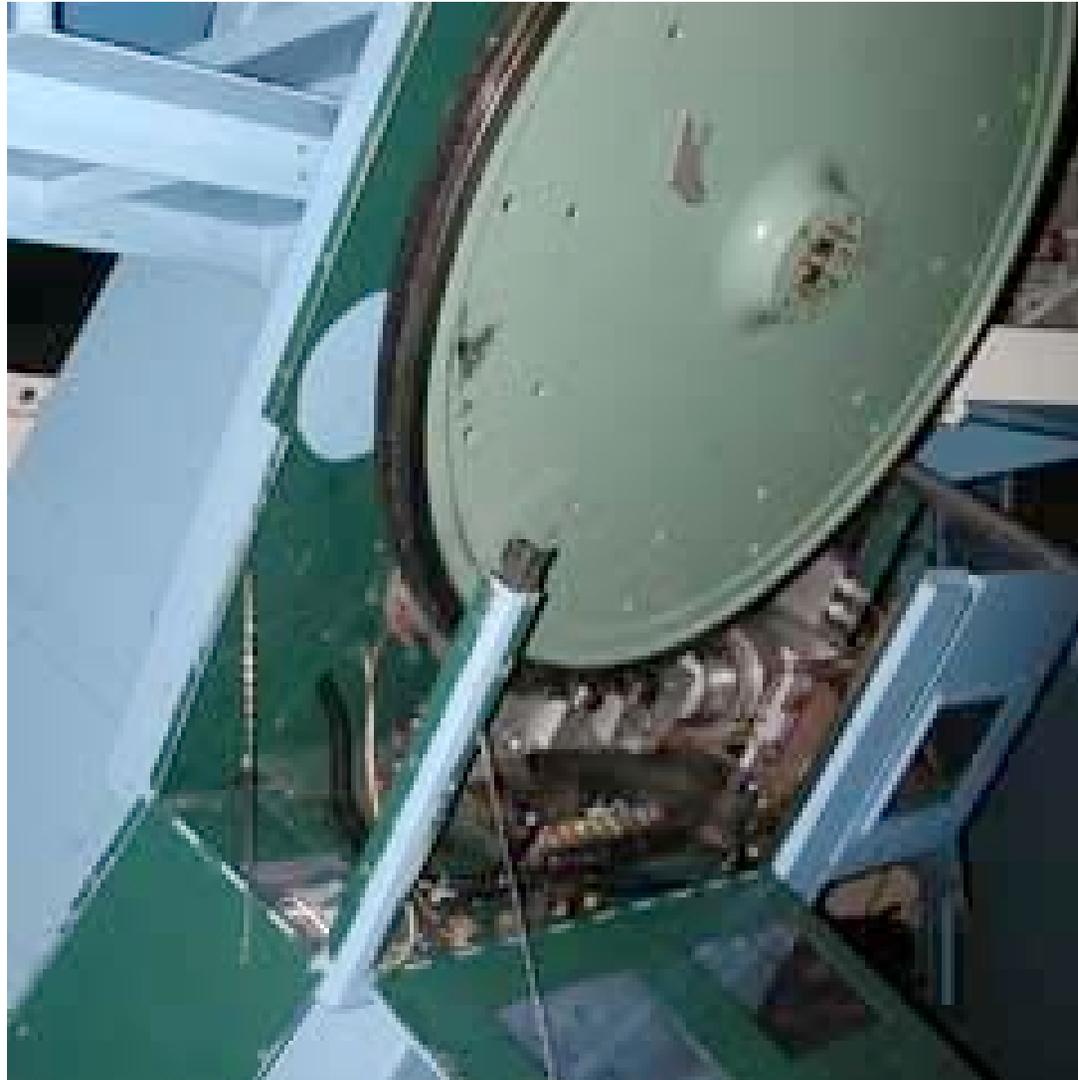
On Kitt Peak



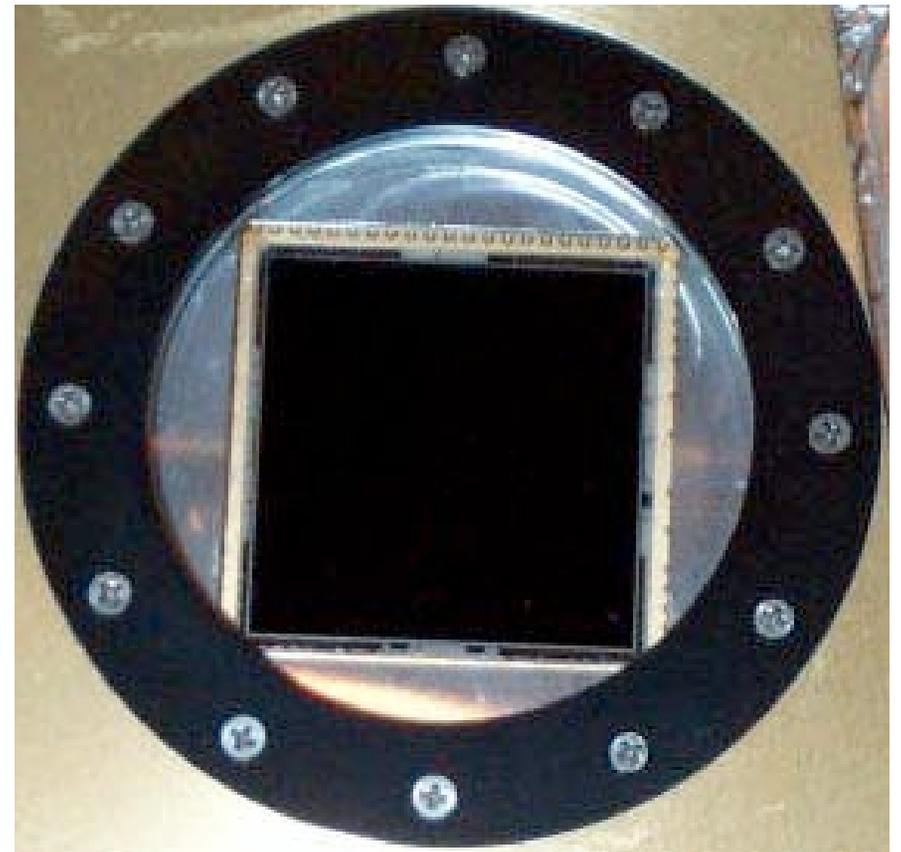
Refurbishment by EOST



Polar Worm Wheel



CCD Camera



Liverpool
Telescope -
completion
now expected
in Spring 2003



GLAST Blazar Studies

- RCT is expected to be fully functional for remote observation in 2003, and beginning the transition to robotic operation.
- Studies of the character of the optical variability of EGRET Blazars planned.
- Photometry needed of reference stars for potential GLAST Blazars.
- Many GLAST blazars of interest will be faint – guided optical observations will be required for precise magnitude determinations.

Networks of Telescope Networks?

- Blazar Optical Simultaneity Server (BOSS) proposed to coordinate blazar observations.
- BOSS would keep track of near-real-time blazar flux densities (including optical and gamma-ray) and recently completed and planned optical observations, and provide real time recommendations to client observatories (both staffed and robotic) about potentially effective observations.

GLAST Quicklook Essential

- Quick look analysis of GLAST blazar fluxes is essential to efficient utilization of ground based resources.

